


It is very likely that the US will get substantially warmer. Temperatures are projected to rise more rapidly in the next one hundred years than in the last 10,000 years. It is also very likely that there will be more precipitation overall, with more of it coming in heavy downpours. In spite of this, some areas are likely to get drier as increased evaporation due to higher temperatures outpaces increased precipitation. Droughts and flash floods are likely to become more frequent and intense.

Areas of Impact

FOREST ECOSYSTEMS

Forest growth is likely to increase in many regions, at least over the next several decades. Over the next century, tree and animal species' ranges will probably shift in response to the changing climate. Some forests are likely to become more susceptible to fire and pests.




COASTAL COMMUNITIES AND INFRASTRUCTURE

Coastal inundation from storm surges combined with rising sea level will very likely increase threats to water and sewer systems, transportation and communication systems, homes, and other buildings.




WATER SUPPLY

Reduced summer runoff, increased winter runoff, and increased demands are likely to compound current stresses on water supplies and flood management, especially in the western US.



HUMAN POPULATIONS

Heat waves are very likely to increase in frequency, resulting in more heat-related stresses. Milder winters are likely to reduce cold-related stresses in some areas.



COASTAL ECOSYSTEMS

Sea-level rise is very likely to cause the loss of some barrier beaches, marshes, and coastal forests throughout the 21st century.



EXTREME EVENTS

It is very likely that more rain will come in heavy downpours, increasing the risk of flash floods.



FRESHWATER ECOSYSTEMS

Increases in water temperature and changes in seasonal patterns of rainfall will very likely directly affect habitat and affect recreational uses of lakes, streams, and wetlands.



AGRICULTURE

The Nation's food supply is likely to remain secure. The prices paid by consumers and the profit that goes for food producers are likely to continue to drop.



RARE ECOSYSTEMS

Alpine meadows, mangroves, and tropical mountain forests in some locations are likely to disappear because the new local climate will not support them or there are barriers to their movement.



SPECIES DIVERSITY

While it is possible that some species will adapt to changes in climate by shifting their ranges, human and geographic barriers, and the presence of invasive non-native species will limit the degree of adaptation that can occur. Losses in local biodiversity are likely to accelerate towards the end of the 21st century.



CORAL REEFS

Increased CO₂ and ocean temperatures, especially combined with other stressors, will possibly exacerbate coral reef bleaching and die-off.



FORESTRY

Timber inventories are likely to increase over the 21st century. Hardwood productivity is likely to increase more than softwood productivity in some regions, including the Southeast.



ISLANDS

Sealevel rise and storm surges will very likely threaten public health and safety and possibly reduce the availability of fresh water.

